

551190  
330034

**Board of  
MINERAL COUNTY COMMISSIONERS**

ARLO K. FUNK, Chairman

KEVIN WADLOW, Vice-Chairman

RICHARD BRYANT, Member

Telephone: 775-945-2446

FAX: 775-945-0706

P.O. Box 1450

Hawthorne, Nevada 89415

GOVERNING BOARD FOR THE TOWNS OF  
HAWTHORNE, WALKER LAKE, LUNING  
AND MINA  
LIQUOR BOARD AND GAMING BOARD

September 17, 2001

Carol Hanlon

Yucca Mountain Site Characterization Office, OCRWM

US Department of Energy

PO Box 30307, M/S #25

North Las Vegas, NV 89036-0307

RECEIVED

OCT 04 2001


**SUBJECT: MINERAL COUNTY'S COMMENTS to the Department of Energy's Site  
Recommendation for a Geologic Repository for the Disposal of Spent Nuclear Fuel  
and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada**

Dear Carol Hanlon:


Consistent with requirements of the National Environmental Policy Act (NEPA) and with the fiduciary responsibility vested to it through designation by the Secretary of Energy as an "Affected Unit of Local Government" pursuant to the Nuclear Waste Policy Act of 1982 (NWPAA) the Board of Mineral County Commissioners is submitting these comments on the Site Recommendation for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada.

We trust that the comments which follow will serve to assist the Department of Energy (DOE) to make a Site Recommendation which meets the statutory requirements for a "legally sufficient" document which can be used by the Secretary of Energy, the President of the United States, and Congress in making major federal decisions regarding the transportation and disposal of spent nuclear fuel, and other high-level radioactive waste. Failure by the DOE to adequately address Mineral County's comments may render the document legally insufficient to support major federal decisions.

The following pages are Mineral County's comments on the DOE's Site Recommendation for Yucca Mountain. These statements will be presented to you by our "Affected Units of Local Government" representative, Judith A. Shankle. We have approved the statements provided to you by Mrs. Shankle.

  
**ARLO FUNK**  
Chairman  
Mineral County Commissioners

  
**KEVIN WADLOW**  
Vice-Chairman  
Mineral County Commissioners

  
**RICHARD BRYANT**  
Member  
Mineral County Commissioners

**Mineral County's Comments to the Department of Energy's Yucca Mountain Project Site  
Recommendation for Spent Nuclear Fuel (SNF) and High-Level Radioactive Waste (HLRW)  
Repository**

The Department of Energy (DOE) states that both geologic and engineered (manmade) barriers will ensure long-term isolation of the waste from the human environment. The DOE uses the engineered barriers to provide most of the protection whereas the Nuclear Waste Policy Act of 1982 originally envisioned that most of the protection would be from the natural or geologic barrier. Mineral County believes that when both natural and engineered barriers are used, the natural barriers should be the basis for isolating the waste.

According to the State of Nevada, the following four items are significant issues when considering Yucca Mountain as a potential repository:

1. Both the DOE and the state agree that water is the vehicle by which the radiation can and eventually will escape the proposed repository traveling downward through fractures in the rock.
    - The DOE and the scientific community accept that the water travels from the surface to the proposed repository horizon in 50 years or less.
    - After 50 years the water enters the tunnels where the waste is to be deposited through a series of engineered barriers that the DOE is proposing to keep water away from the waste.
  2. Problems with the **Barrier System** include but are not limited to the following:
    - a. The DOE proposes to place a series of titanium drip shields over the disposal containers. While the DOE believes that these shields will remain intact for thousands of years, research by the State of Nevada and the Nuclear Regulatory Commission (NRC) shows that because of fluoride dissolved in Yucca Mountain water, the shields will probably last for less than 100 years.
    - b. Water penetrating the drip shield contacts the waste package. DOE is proposing that a nickel alloy called alloy 22 be used for constructing the waste packages. DOE predicts that no containers will be breached due to corrosion in less than 10,000 years. Research done by the State, however, suggests that because of lead and other trace elements in the Yucca Mountain environment, the expected life-time of the waste packages is probably less than 1,500 years and could be as little as 500 years.
  3. Waste can begin to move out of the repository to the water table beneath Yucca Mountain in as little as 700 years. Both the State of Nevada and the DOE agree that once radioactive materials leave the breached waste containers, they can begin showing up in wells 11 miles from Yucca Mountain within 500 years.
    - While DOE's model predicts that waste containers will remain intact for over 10,000 years, research sponsored by the State shows that the containers are likely to corrode much sooner than that.
    - DOE's claim that Yucca Mountain will effectively meet minimum federal standards for isolation of this waste for 10,000 years is not supported by state research, rendering Yucca Mountain unsuitable for development as a repository.
  4. Presently, the DOE's proposed Yucca Mountain repository will contaminate an aquifer that is now being used for drinking water and irrigation. Not only will the aquifer be contaminated, it will be contaminated at a level that is not allowed anywhere else in this country. The agricultural area that is supported by this aquifer is currently home to farms, ranches and dairies that provide 20% of the milk supply for Nevada.
- ◆ The DOE is continually evaluating the analytical design scenarios and range of possible design features.
- What-if, analytical, theoretical scenarios are not conclusive. To date, no specific repository or waste package design has been selected and analyzed.
  - The analytical, theoretical scenarios and possible variable ranges should not be a basis for providing a recommendation whether the site is suitable or not as a repository for HLRW. A final design should be proposed, produced and analyzed before such a recommendation could be made.

**Mineral County's Comments to the Department of Energy's Yucca Mountain Project Site Recommendation for Spent Nuclear Fuel (SNF) and High-Level Radioactive Waste (HLRW) Repository**

- The radioactive waste should *not* be buried because there is no way mankind can predict what will happen in the future. High risk of transporting, seismic activity, inclement weather, and the magnitude of this never-tried-before, unprecedented campaign are only a few reasons why the radioactive waste should not be buried. The DOE should accept the waste at the site of origin until alternative ways could be studied so technology can find a way to reuse this radioactive waste. Thus, a reasonable no-action alternative is preferred until technology can provide a better way of eliminating SNF and HLRW.
- ◆ The DOE 's site analyses should include analysis of the risks of transporting it, funds to monitor it, costs of drip shields to be emplaced at time of waste package emplacement, leaks and repair, and mitigation costs.

**In conclusion Mineral County believes:**

The proposed Yucca Mountain Project is not a suitable site as a repository for High-Level Nuclear Radioactive Waste.

- ◆ Mineral County agrees with the State of Nevada's comments on the DOE's SDEIS (page 1):  
The DOE with all this time and study still "fail(s) to appropriately reflect the unique nature and scope of the Yucca Mountain program. It does not adequately assess impacts associated with the repository and related activities, and it is not in compliance with either the letter or spirit of NEPA. The State formally reiterates its assertion that a Programmatic Environmental Impact Statement (PEIS) for a high-level waste (HLW) program should have been, and still should be, prepared. The unique, first-of-a-kind nature, complexity, and unprecedented time scale of the federal HLW program require the preparation of a PEIS, with project-specific EISs for related program elements tiered to the PEIS. The HLW program is simply too massive in scope and overwhelming in complexity for DOE to attempt to use a single EIS as the vehicle for assessing impacts and making programmatic decisions. By preparing a narrowly focused, non-programmatic EIS such as the Draft released for comment (and then indicating that it will be the basis for some program decisions and not for others), DOE is circumventing the intent of the National Environmental Policy Act."
- ◆ The shipping campaign has changed for both the duration and materials being used. The DOE has indicated that it will continue performance conformation activities following site approval and designation. Its analyses are inadequate in so many respects, especially with respect to its transportation elements (parameters) and should address mitigating increased transportation risks and what mitigation measures from the DEIS remain valid.
- ◆ As tragic as terrorist attacks are, the magnitude of damage would not come close to what would happen if these terrorist fanatics were to get a hold of the HLNW. The Japanese incident, terrorist's attacks and human error (i.e., the WIPP incident where a truck transporting Low-Level Nuclear Waste got mis-routed) are only wake up calls and should be heeded to, when considering a campaign of this magnitude. The DOE and the nation are not ready to take on a campaign of this magnitude.